

Assessing the Socio-Economic Factors of Rural Non-Farm Laborers in Mon and Wokha Districts, Nagaland

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Abstract

Working hours of the laborers, access to financial services and the variables representing access to Physical infrastructure i.e., electricity, water supply and metallic road shows statistical significance while variables like age and education have a negative on the dependent variable. This paper examines the various factors-including socio-economic conditions, as well as push and pull factors-that influence rural laborers' engagement in the non-farm sector, and further explores the challenges and constraints they face in the workplace.

Keywords: Rural Non-Farm Laborer, socio-economic factors, challenges and constraints

Introduction

The growing importance of the rural non-farm sector is increasingly evident and cannot be overlooked. Due to its low investment requirements and minimal skill demands, the Rural Non-Farm Sector has emerged as a significant hotspot for employment generation. According to the Periodic Labor Force Survey (PLFS) 2023-2024 report the sector witnessed an employment growth of 40.1 percent, with a compound annual growth rate (CAGR) of 2 percent over the period from 1993-94 to 2023-24 in India. Meanwhile, the North Eastern Region (NER) and Nagaland recorded an employment growth rate of 47 Percent and 44.6 percent respectively, with corresponding CAGRs of 1.8 percent and 1.9 percent. Thus, the data clearly affirms the undeniable presence and growing significance of the Rural Non-Farm Sector. According to NSSO Reports (various rounds on employment and unemployment), the Rural Non-Farm Sector comprises all non-agricultural economic activities carried out in rural areas, excluding crop cultivation, livestock rearing, forestry-related activities and fishing. It Comprises manufacturing, construction, mining, trade, transport and other services. Lanjouw and Shariff (2004) made an attempt to evaluate the role of the non-farm sector to household income. The study found strong proof of the essential contribution of education, per capita landholdings, wealth in determining access to non-farm occupations. They also found that the non-farm sector offers relatively few real opportunities for women in rural India, irrespective of region. The study further revealed that in all regions, non-farm earnings are generally higher in more densely populated villages.

Moreover, the study identified that in both the rural and urban area, the non-agricultural sector has recorded a higher growth rate in employment than agriculture in almost all periods. There is also indicative of a gradual diversification from the primary sector, albeit at a slow rate as per (Bhalla and Hazell, 2003).

The non-farm households no longer appear under the worst category of the low income group, and movement to rural non-farm occupations has been poverty-reducing. Credit, skill development, technology, information, and effective targeting are the major constraints in the increased participation in these sectors (Sen, 1996).

Objectives of the study

1. To determine the socio-economic factors affecting the participation of laborers in the Rural Non-Farm activities.
2. To examine the push and pull factors that drive rural laborers towards non-farm employment.
3. To examine the difficulties and limitations encountered by the laborers

Data Sourcing and Research Methodology

The study obtained primary data via a structured questionnaire based on random sampling with a sample size of 60 laborers from 12 villages of two districts i.e., Mon and Wokha districts of Nagaland. The statistical techniques employed in this study includes Tobit model, Relative Importance Index (RII) and Garrett Ranking Technique.

Tobit Regression Model

$$Y_i = \begin{cases} \beta_1 + \beta_2 + u_i & \text{if RHS} > 0 \\ 0 & \text{otherwise} \end{cases}$$

Relative Importance Index

$$RII = \frac{\sum W}{AN}$$

Garrett Ranking Technique

$$GMS = \frac{\sum G_p R_f}{N}$$

Findings

To determine the socio-economic factors influencing the participation of laborers in rural non-farm activities. The Tobit regression model was employed. Income was taken as the censored dependent variable in the model with 12 predictor variables which are age, gender, education, family size, dependent members, working hours, marital status, landholding, access to credit facilities, electricity, water supply and metallic road.

Table 1: Tobit regression results on socio-economic factors of rural laborer participation in non-farm activities.

N	60
Prob>Chi ²	0.0000
LR Chi ² (12)	107.73
Log likelihood	-70.25
Pseudo R ²	0.434

Employment	Coefficient	Std.err	t	P> t
Age	-.226	.132	-1.71	0.093

Gender	1.736	.925	1.88	0.067
Education	-.099	.110	-0.90	0.372
Family Size	.028	.106	0.27	0.792
Dependent members	.195	.135	1.44	0.155
Working Hours	1.205	.167	7.23	0.000
Marital Status	.213	.575	0.37	0.714
Landholding	.442	.683	0.65	0.520
Access to Financial Services	3.751	.785	4.78	0.000
Electricity	1.051	.487	2.15	0.036
Water supply	1.326	.631	2.10	0.041
Metallic Road	3.499	.569	6.15	0.000
Var (e.log income)	.6088	.111		

Source: Field Survey

Except for age and education, all the other independent variables like the gender, family size, dependent members, working hours marital status, landholding, access to credit facilities, electricity, water supply and metallic road positively influence the dependent variable. A t-value of 7.23 for working hours shows statistical significance as the calculated t-value (7.23) exceeds the critical value, implying that as the working hours of the laborers increases the income of the laborer also increases. The variable access to credit facilities also exhibits statistical significance, suggesting that credit occupies a crucial role in enabling participation in Rural Non-farm activities. The variables representing access to Physical infrastructure i.e., electricity, water supply and metallic road shows statistical significance in the model, indicating that improved basic infrastructure enhances mobility and productivity leading to participation in the non-farm activities among rural laborers. Variables like age and education have a negative impact because older and individuals with higher levels of education are less likely to engage in manual or low paying non-farm labor activities. Overall Tobit regression Model is statistically significant as $\text{Prob} > \chi^2 = 0.00$ indicating that the socio-economic variables included in the model jointly explains the variation in the dependent variable.

The Relative Importance Index (RII) was used to rank the important factors affecting the rural laborer participation in the non-farm sector. Factors with higher RII values is considered as the most crucial factor in shaping their decision to involve in the non-farm employment workforce.

Table 2: RII-Push and Pull factors influencing rural non-farm laborers

Pull Factors	RII	Rank
Rising demand for labourers in rural markets	0.43	3
Better returns in the sector	0.58	1
Minimal entry-level skill requirement	0.54	2
Skill Acquisition	0.40	5
Access to basic public services like road networks, electricity supply, water systems etc.,	0.41	4

Push Factors	RII	Rank
Low agricultural income	0.53	1
Small Landholding	0.38	5
Risks/ uncertainty in farming	0.51	2
Economic hardship	0.50	3
Limited opportunities in agricultural activities	0.39	4

Source: Field Survey

Under the pull factors, better returns in the sector with RII score of 0.58 was ranked first based on the RII (Table 2), suggesting that the prospect of earning higher income as compared to farming activities is the strongest driving force for rural laborers to join the non-farm activities followed by minimal entry-level skill requirement and rising demand for labourers in rural markets with RII score of 0.54 and 0.43 Access to basic public services like road networks, electricity supply, water system etc., and skill acquisition with RII score of 0.41 and 0.40 was ranked the fourth and fifth, indicating that although important, it was perceived as the least influential factors as compared to the other three factors.

Under the push factors, low agricultural Income with RII score of 0.58 was ranked first based on the RII (Table 2), indicating that farm-based livelihoods are not sufficient to meet the rural household consumption needs followed by risks/ uncertainty in farming and economic hardship with RII score of 0.51 and 0.50. Limited opportunities in agricultural activities with RII score of 0.39 was ranked the fourth and small landholding with RII score of 0.38 were ranked the lowest suggesting that land size has no statistically significant effect on their decision to participate in non-farm activities.

The Garrett ranking technique was employed to identify and rank the difficulties and limitations faced by rural non-farm labourers in the workplace. An aggregate of seven factors was identified and ranked in light of the respondents' scores.

Table 3: Garrett Ranking for challenges and constraints in the workplace

Factors	Garrett Mean Score	Rank
F1- Low wage and income instability	70.5	1
F2- Long working hours	46.04	5
F3- Lack of skills and training	51.08	4
F4-Limited access to finance and credit facilities	53	2
F5-Limited access to social security benefits	37.58	6
F6- Lack of Job security	36.67	7
F7- Exposure to occupational hazards	52.08	3

Source: Field Survey

The data presented in Table 3 indicate that factor one i.e., F1-low wage and income instability was ranked first in the Garrett ranking with Garrett Mean Score of 70.5, signifying that it is the most critical workplace

constraints faced by the rural non-farm labourers. Factor four was ranked as the second place as majority of the sampled villages are not in close proximity to banking facilities, limiting rural residents' access to formal financial services. Factor seven was ranked the third place especially by labourers working in mining, quarrying and stone crusher. Likewise, factor three and factor two was placed in the fourth and fifth position by the respondents while factor five and factor sixth was ranked as the least critical workplace constraints faced by the labourers.

Conclusion

In areas, where agriculture provides only basic sustenance but fails to generate sufficient income to meet broader economic needs of rural households, the rural non-farm sector serves a vital function in providing additional income and employment opportunities to rural communities. This study underscores that rural non-farm laborers, while contributing significantly to the local economy, faces a number of socio-economic challenges and constraints like low wage and income instability, limited access to finance and credit facilities, lack of skills and training etc., Therefore, strengthening rural infrastructure, improving access to credit facilities, bridging skill gaps and regulating the working conditions of rural labourers to ensure fair wages, occupational safety and decent employment standard in Rural Non-Farm Sector, on the side of policymakers, will play a crucial role in addressing the struggles of rural non-farm labourers.

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